

8/13/04

AF Ifw



PTO/SB/21 (02-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

4

Application Number

09/133,741

Filing Date

08/13/1998

First Named Inventor

Baldwin, David Robert

Art Unit

3661

Examiner Name

Nguyen, Thu V.

Attorney Docket Number

TD-143

ENCLOSURES (Check all that apply)

☐

Fee Transmittal Form

☐

Fee Attached

☐

Amendment/Reply

☐

After Final

☐

Affidavits/declaration(s)

☐

Extension of Time Request

☐

Express Abandonment Request

☐

Information Disclosure Statement

☐

Certified Copy of Priority Document(s)

☐

Response to Missing Parts/
Incomplete Application

☐

Response to Missing Parts
under 37 CFR 1.52 or 1.53

☐

Drawing(s)

☐

Licensing-related Papers

☐

Petition

☐

Petition to Convert to a
Provisional Application

☐

Power of Attorney, Revocation
Change of Correspondence Address

☐

Terminal Disclaimer

☐

Request for Refund

☐

CD, Number of CD(s) _____

☐

After Allowance communication
to Technology Center (TC)

☐

Appeal Communication to Board
of Appeals and Interferences

☒

Appeal Communication to TC
(Appeal Notice, Brief, Reply Brief)

☐

Proprietary Information

☐

Status Letter

☐

Other Enclosure(s) (please
Identify below):

Remarks

Reply Brief (3) pages plus cover letter (1) page

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm
or
Individual name

N. Elizabeth Pham

Signature

N. Elizabeth Pham

Date

08/12/2004

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name

Peggy Heath

Signature

Peggy Heath

Date

08/12/2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: :
Baldwin : Art Unit: 3661
AN 09/133,741 : Examiner: Thu Nguyen
Filed: 08/13/1998 : Atty's Docket: TD-143
For: Improved Triangle Clipping for 3D Graphics (confirmation no. 6925)

REPLY BRIEF

Honorable Commissioner of Patents and Trademarks
Alexandria, VA 22313

Sir:

Enclosed is a reply brief for the above application. Four complete copies are included, three bound and one unbound. The reply brief is being filed in response to the Examiner's Answer mailed on 07/14/2004.

Any fee necessary for consideration of this paper has been authorized to be charged to Deposit Account Number 07-2320.

Respectfully submitted,

N. Elizabeth Pham, Reg.No. 49,042

Customer Number 29106

Attorney for Applicant

Groover & Holmes
One Galleria Tower, Suite 1370
13355 Noel Road
Dallas TX 75240
972-980-5840, FAX -5841

12 AUGUST 2004



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: :
Baldwin : Art Unit: 3661
AN 09/133,741 : Examiner: Thu Nguyen
Filed: 08/13/1998 : Atty's Docket: TD-143
For: Improved Triangle Clipping for 3D Graphics (confirmation no. 6925)

REPLY BRIEF

Honorable Commissioner of Patents and Trademarks
Alexandria, VA 22313

Sir:

Appellant respectfully submits the following Reply to the new arguments presented in Examiner Nguyen's Answer mailed 07/14/2004.

RESPONSE TO NEW ARGUMENTS

In her response to the appeal brief filed on 04/14/2003, Examiner Nguyen raises the following new arguments:

1. Examiner Nguyen has suggested that *Rossin* uses only one memory device 304 to store both the input and output vertices of a primitive. However, this ignores the fact that *Rossin* still requires an additional memory device 306 in order to perform the clipping process. Without memory device 306, *Rossin* would not be able to clip an input primitive.

The innovations of the present application do not require a second memory device. The present inventions are able to clip an input primitive using just one single circular buffer. This feature is claimed, for example, as follows:

Claim 1: "performing a clipping algorithm which uses only a single circular buffer to store input and output vertices of a primitive";

Claim 16: "circuitry to implement a clipping algorithm which uses only a single circular buffer to store input and output vertices of a primitive"; and

Claim 48: "wherein said geometry unit uses only a single circular buffer to store input and output vertices of said primitive".

Therefore, even if one were motivated to replace memory device 304 of *Rossin* with a circular buffer as suggested by Examiner Nguyen, it still would not result in the present inventions. The teachings of *Rossin* would still require a secondary buffer.

2. Examiner Nguyen also has suggested that the ability of shifting vertices from the input list location to the output list location suggests a circular buffer. However, Applicant respectfully disagrees with this suggestion.

A circular buffer refers to an area of memory used to store a continuous stream of data by starting again at the beginning of the buffer after reaching the end. A circular buffer is usually written by one process and read by another. Separate read and write pointers are maintained.

Memory device 304 of *Rossin* does not maintain separate read and write pointers. Instead, *Rossin* moves the data from location to another by physically copying the data from location to another. This is actually characteristic of a non-circular buffer.

A prima facie case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). *Rossin* does not suggest a circular buffer. Hence, there is no suggestion to combine.

REQUESTED RELIEF

The Board is respectfully requested to reverse the outstanding rejections.

Respectfully submitted,



N. Elizabeth Pham, Reg.No. 49,042

Customer Number 29106

Attorney for Applicant

Groover & Holmes
One Galleria Tower, Suite 1370
13355 Noel Road
Dallas TX 75240
972-980-5840, FAX -5841

12 AUGUST 2004